

CLAIM AMENDMENT

Please amend the claims in accordance with the following listing.

Listing of Claims:

Claim 1 (Currently Amended): A method, including steps of
creating at least one snapshot for each mirrored file system volume of a plurality of file
system volumes;
including a consistency point value in said at least one snapshot indicating sequence in which
said at least one snapshot was generated;
 examining a the plurality of mirrored file system volumes for a consistency point values; and
~~value;~~
 determining a most up-to-date said file system volume based on the consistency point values.
~~in response to said steps of examining; and~~
~~selecting a set of changed file blocks between said up-to-date said file system and each one~~
~~of said plurality of mirrored file system volumes.~~

Claim 2 (Currently Amended): A method as in claim 1, further comprising: ~~wherein~~
~~said steps of selecting include~~
 determining a snapshot held in common between said most up-to-date said file system
 volume and at least one other mirrored file system volume of said plurality of mirrored file system
 volumes; and

selecting those file blocks changed between said snapshot held in common and said most up-to-date said file system volume.

Claim 3 (Currently Amended): A method as in claim ~~1~~ or 2, including steps of re-synchronizing said at least one other mirrored file system volume of said plurality of mirrored file system volumes with said most up-to-date said file system volume in response to said steps of selecting.

Claim 4 (Currently Amended): Apparatus including
a plurality of mirrored file system volumes, each having at least one snapshot including an entire consistent file system, each said snapshot having a consistency point value indicating sequence in which each said snapshot was generated;

a first comparison element capable of being coupled to a plurality of said consistency point values and capable of determining a most up-to-date mirrored file system volume of the plurality of mirrored file system volumes based on the consistency point values;

a second comparison element, responsive to an output of said first comparison element, said second comparison element being capable of being coupled (a) to a first snapshot associated with ~~said output on a first said~~ most up-to-date mirrored file system volume and (b) to a second snapshot associated with a second said volume, said second comparison element being capable of providing a selection of file blocks ~~in response thereto~~ that differ between said second volume and said most up-to-date mirrored file system volume.

Claim 5 (Currently Amended): Apparatus as in claim 4, wherein said second snapshot is held in common between said ~~first~~ most up-to-date mirrored file system volume and said second volume.

Claim 6 (Currently Amended): Apparatus as in claim 4 or 5, including an element capable of re-synchronizing ~~at least one of said plurality of mirrored file system volumes~~ said second volume in response to said second comparison element.

Claim 7 (New): Apparatus as in claim 6, further comprising a network interface capable of receiving messages requesting that the data of the mirrored file system volumes be altered.

Claim 8 (New): Apparatus as in claim 6, further comprising an element capable of including the consistency point value of each said snapshot in each said snapshot.

Claim 9 (New): Apparatus as in claim 4, wherein the first comparison element determines said most up-to-date mirrored file system volume by determining a mirrored file system volume with an extreme consistency point value.

Claim 10 (New): Apparatus as in claim 4, wherein the first comparison element

determines the most up-to-date mirrored file system volume by determining a mirrored file system volume with the highest consistency point value.

Claim 11 (New): Apparatus as in claim 10, further comprising an element capable of generating a new snapshot from said mirrored file system volume with the highest consistency point value.

Claim 12 (New): Apparatus as in claim 4, further comprising a re-synchronization element capable of copying the selected file blocks from said most up-to-date mirrored file system volume to said second volume.

Claim 13 (New): Apparatus as in claim 4, wherein said file system volumes include a RAID subsystem.

Claim 14 (New): Apparatus as in claim 4, wherein said file system volumes include volumes for parallel stored systems.

Claim 15 (New): Apparatus for maintaining a plurality of mirrored file system volumes, comprising:

a first element capable of creating at least one snapshot for each mirrored file system volume of the plurality of mirrored file system volumes and including a consistency point value in said at

least one snapshot indicating sequence in which said at least one snapshot was generated;

a second element capable of examining the snapshots of the plurality of mirrored file system volumes for consistency point values; and

a third element capable of determining a most up-to-date said file system volume based on the consistency point values.

Claim 16 (New): A method as in claim 1, wherein the step of determining a most up-to-date said file system volume comprises determining the highest consistency point value.

Claim 17 (New): A method as in claim 2, further comprising generating a new snapshot of said most up-to-date said file system volume.

Claim 18 (New): A method as in claim 3, wherein the step of re-synchronizing comprises copying the file blocks changed between said snapshot held in common and said most up-to-date said file system volume from said most up-to-date said file system volume to said at least one other mirrored file system volume.

Claim 19 (New): A computer program product comprising program code means that, when executed on a computer system, causes the computer system to effect the steps of any one of claims 1, 2, 3, 16, 17, or 18.